ASH GROVE CEMENT COMPANY

Western Region P.O. Box 51 Nephi, Utah 84648 801-857-1212

Lynn Kunzler

July 1, 1994

Utalı State University Soil Testing Laboratory Logan, Utah 84322-4830

Re: Soil Testing

To Whom It May Concern:

Enclosed is a copy of the Baseline Soils and Overburden Laboratory Analyses which is recommended by the State Division of Oil, Gas and Mining. There are also three soil samples. The three soil samples are describe as follows:

- 1) Sample of lighter colored top soil taken from the County Canyon shale quarry located on the east side of Big Flat, on the south end of East Tintic mountain range.
- 2) Sample of darker colored top soil taken from the County Canyon shale quarry located on the east side of Big Flat, on the south end of East Tintic mountain range.
- 3) Sample of red colored top soil taken from the Navajo Sandstone Quarry located on the southeast mountains of Dog Valley.

There will be a test plot at the County Canyon Quarry. The information gathered from the soil analyses of samples 1 and 2 will help us determine what plants would be best for revegetation, and what amendments could be economical to use. The total size of the test plot would be about 100 ft. x 100 ft.

The Navajo Sandstone Quarry has been vacant for a few years. Ninety percent of the original five acres has revegetated itself with little assistance. However, the regions of the quarry with this red soil have supported minimal growth.

Prior to running the analyses please let me know the total cost so that a purchase order can be initiated. Thanks for you assistance in this matter. If you have further questions call me at 801-857-1211

Sincerely,

Andrew Robinson Andrew Robinson

Plant Engineer



UTAH STATE UNIVERSITY · LOGAN, UTAH 84322-4830

Telephone (801) 750-2217 Fax (801)750-3376

Soil Testing Lab Feed Analysis Lab USU Analytical Laboratories Plant Analysis Lab Irrigation Water Analysis Lab

27 July 1994

Andrew Robinson
Ash Grove Cement Company
Western Region
PO Box 51
Nephi, UT 84648 Results for:

Scil samples received 7/5/94.

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1 light 2 dark 3 zed	¥	1 light 2 dark 3 red	ij
56 54 18	Sand	37.9 57.0 60.5	SP
28 20 50	Silt	7.6 7.5 7.9	рн
16 26 32	X Hydrometer - Silt Clay	0.7 1.0 0.4	EC mmhos/cm
SICL SCL SICL	Texture	2.7 4.2 1.8	
18.1 36.8 4.2	SO4-S mg/kg	225 194 141	NaHCO3 P K mg/kg
16.4 20.4 21.0	1/3 Atm	2.8 4.7 1.8	N03-N
7.7 10.3 10.9	15	1.02 2.29 0.86	MO3
		1.9 0.9 1.4	SAR
		23.69	H20 Sol. HCO3 meq/L
		12.7 10.2 11.6	%CaCO3
		13.0 17.0 17.2	CEC meq/100g

SP - Saturation Percentage XAtm - Mass water content at applied pressure (in bars).